



Site History

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Drive about 100 miles west of Chicago, IL, and you'll discover Nachusa Grasslands, a more than 4,000-acre mosaic of prairie, savanna, and woodlands (721 acres are conservation easements) owned and operated by The Nature Conservancy, a nonprofit conservation organization. Although the site in Franklin Grove was originally inaugurated in 1986, its history goes back far beyond that. It's a story of glaciers, inland seas, Native Americans, farmers, and restorationists who cared enough to save a few prairie remnants from certain development, then parley those remnants into the thriving preserve Nachusa is today.

Illinois' nickname is "The Prairie State." Yet only about 1/10 of one percent of the original prairie remains. The invention of the John Deere plow enabled early settlers in Franklin Grove to turn over the rich prairie topsoil, obliterating the original prairie ecosystem. By the 1970s, most of the remaining prairie remnants in Illinois were found in old cemeteries, corners between fence rows, and along railroad right-of-ways. But in Franklin Grove, almost 274 acres of pure prairie managed to hang on.

The first year we were here we were driving down Lowden Road and we heard the upland sandpiper. I remember Doug saying, Gee, if that bird is here and all these fields are just pastures, then there's got to be some good prairie over there.
-- Dot Wade

"Knobs," which are small rolling hills, alternated with depressions in the landscape, making the area difficult to farm. Small pockets of tallgrass prairie were saved from the John Deere plow, which ironically, was first forged in Grand Detour, just a few miles to the west. A historic museum marks the spot today.

Four hundred and seventy million years ago -- long before a plow first touched the area around Nachusa Grasslands -- the landscape in Franklin Grove was dominated by a tropical sea. Glaciation helped form its rolling hills, knobs and flatlands. In an essay, "Geological History," from an early undated issue of Nachusa Grassland's newsletter, *Prairie Smoke*, volunteer Tim Keller wrote, "sand washed in from higher landforms and created beaches and dunes." Over

time, he said, the sand grains were forged together into sandstone, which is pure silica. In modern times, it is used for making glass. Today, these formations are called St. Peter's Sandstone. Shallow seas, Keller said, were deposited over this St. Peter's Sandstone, which repeatedly advanced and withdrew. The land then lifted, and the limestone eroded, Keller continued. About 2 million years ago, Keller noted, the climate changed and sudden cooling occurred. Nachusa was covered by an ice sheet, which advanced and retreated. Ice jams, which caused a backup of water, stripped away glacial deposits. The uplands above some streams were plugged with sediment and eroded, he said. Today at Nachusa Grasslands, freezing and thawing continues to bring a new crop of rocks to the subsurface from this period, he said. (Keller, undated)

Between the knobs and ridges at Nachusa is a flat and poorly drained landscape with a clay hardpan below the surface, approximately two to four feet deep, according to Todd Bittner, a former restoration technician at the site, in a *Prairie Smoke* essay from 1996. It is almost impenetrable to water and all of the ground water must pass horizontally over this hardpan, he said. This gave birth

to a thriving wetland community. It wasn't until the 1950s that much of this wetland was tilled and drained for agricultural use. Today, these tiles are being broken up and wetlands restored to their original condition, Bittner said (Bittner, 1996).

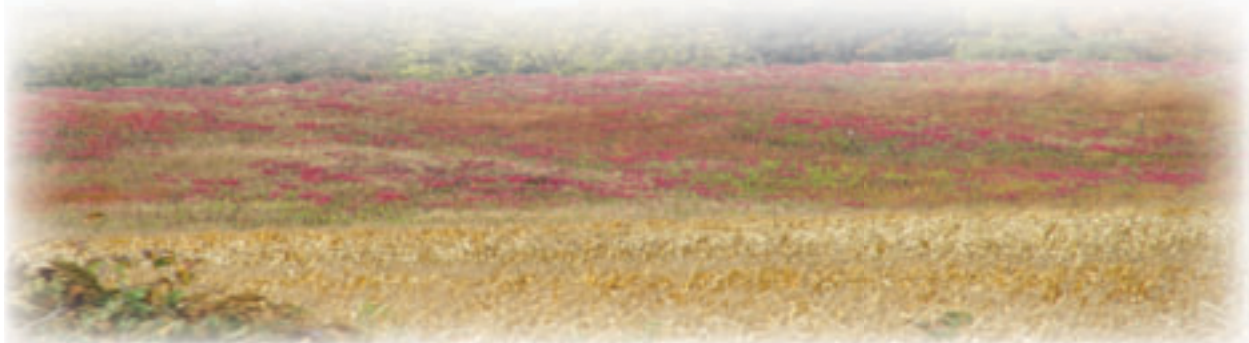
A calciferous fen and sandboil are two unique characteristics of the site. But before farmers tilled the land and tilled the wetlands, Native Americans used it for hunting and possibly agriculture, noted Betsi McCay in a *Prairie Smoke* essay in 1993. Two tribes that likely inhabited Nachusa include the Sauk and the Fox, although no artifacts or documented use has been found to date. The first non-Native Americans to explore Nachusa and settle here likely came toward the end of the 1600s (McCay, 1993).



The woodlands looked much different than they did today. Early surveyors in 1839 noted no cherries, cedars, or box elders (present today) – but several different types of oaks (including red and white), walnuts, and hickories on the west end of what now is Nachusa (Bill Kleiman, 1996). An undated brochure, *Nachusa Grasslands: An Introductory Guide*, noted, “For over 100 years, this area was largely deprived of fire, giving trees like cedars and wild cherry – which aren't natural to prairies – a chance to grow.” The brochure continued, “Today, conservancy volunteers conduct carefully controlled prescribed burns and remove the unnatural invading trees to restore the original prairie.”

Other portions of the site were used for crops during the 1900s; particularly soybeans and corn. As land was acquired, the brochure noted, “Some areas are leased to farmers for crops until they can be restored.” This practice continues today, as new lands are acquired and slated for future restoration efforts. Also, if restoration efforts fail on a particular portion of land, it is also sometimes replanted as cropland to get weeds under control. Then the restoration is attempted again (interview with Susan Kleiman, 2013).

Agriculture wasn't the only threat to Nachusa's prairie remnants. Development was also a factor. The saving of the site came about in a serendipitous way. Slated for housing development, the siren call of the upland sandpiper lured two naturalists who were motoring out that way to explore the site. In an interview, “Exploring a Prairie Eden,” (*Prairie Smoke*, 1990), the unknown author describes how



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Doug Wade and his wife, Dot, stumbled onto the original prairie remnants that would be the impetus for Nachusa Grasslands. At that time, Doug was the Director of Outdoor Education at Taft Campus, part of Northern Illinois University, just down the road in Oregon, IL.

Here is the story as Dot remembered it:

The first year we were here we were driving down Lowden Road and we heard the upland sandpiper. I remember Doug saying, "Gee, if that bird is here and all these fields are just pastures, then there's got to be some good prairie over there." We found out the land belonged to Delbert Schafer. While we were exploring one day, we found this beautiful knoll, separate from the others, just south of the big group of pine trees. It's called Schafer's Knob on the map. I remember I had heard of silky aster but I had never seen it. Then one Fourth of July we took everybody who was left at Taft and invited them for breakfast at 6 o'clock -- you'd never do that today -- and we all went hiking on what we called the upland plover prairie. Plover was the old name from the sandpiper. Mr. Schafer gave us permission to drive anywhere we wanted to. You know what they call Doug's Knob and my knob? We could drive all the way in there. It was our favorite place to go when we had a free afternoon. The prairie on Doug's Knob is absolutely spectacular. We met Tim Keller. He was very good at getting people excited about the prairie. He and Doug worked together to make it a preserve. The Nature Conservancy bought the Colwell property just two days before my husband passed away. We'd gone to hear Ray Schulenberg deliver his farewell speech at the Morton Arboretum, and Jill Riddell told us they'd signed the papers. Doug was the first one to find prairie bush clover on that site.



Prairie plants, reptiles, insects, and wildlife are all managed today within the preserve. Eight species as of 2013 are “nested targets” within the restored prairie areas: prairie bush clover, hill’s thistle, regal fritillary, ornate box turtle, bobolink, Henslow’s sparrow, dickcissel, and sedge wren (Hagen, et al, 2013). Other conservation targets include kitten tails, red-headed woodpeckers, forked aster, and the eastern prairie fringed orchid (Hagen, et al, 2013).

In 1993, Nachusa hired its first permanent full-time preserve manager, Bill Kleiman, who, after two decades, continues as the site manager as of this writing. Kleiman is an Illinois native, educator, farmer, and restorationist who had previously worked for The Nature Conservancy in Colorado and Wyoming. Kleiman’s wife Susan, although not on the payroll, is also a restoration specialist and interpreter, whose unpaid work has been invaluable to the site. The addition of the Kleimans, noted a December 1993 essay in *Prairie Smoke* by editor Earl Thomas, marked “the beginning of a new chapter in the Grasslands history.”

By 1993, the site had expanded to 993 acres (*Prairie Smoke*, 1993). In 1993, Nachusa also published a “vision



statement,” put together by volunteer Matthew Baumgardner:

“We see Nachusa Grasslands as a loving, forgiving, intertwined landscape of plants, animals, and minerals that --- to fulfill its destiny here in the vast expanses of Northern Illinois --- allows us and our progeny the opportunity to participate in its ongoing evolution toward a biodiversified ecosystem that connect some with nostalgic reflections of the past, some with the wonders of the present, and some with hope for the future. (Baumgardner, 1993)

Volunteer stewards like some of these mentioned in this essay are the heart and soul of Nachusa Grasslands. Each “unit” (a portion of land) at Nachusa has its own steward. The site’s vision is to restore the plant and animal life to pre-white settlement conditions. This is accomplished by planting, grazing (formerly cattle; now bison), invasive plant herbiciding and management, and through prescribed burns. (Hagen, et al, 2013)

Over the years, invasive plants have kept stewards busy herbiciding and handpulling. These invasive plants have included wild parsnip, white sweet clover, garlic mustard (*Prairie Smoke*, 1991); smooth sumac, multi-flora rose, brush, trees and other woody vegetation (*Prairie Smoke*, 1992); cedar (*Prairie Smoke*, 1992); buckthorn (*Prairie Smoke*, 1994); reed canary grass (*Prairie Smoke*, 1994); thinning cherry trees (*Prairie Smoke*, 1996); and birds foot trefoil (Considine, 2013) to name just a few.

“Miles” of barbed wire from the former agricultural farmland was also removed from the site (*Prairie Smoke*, 1992). There was also a consensus in 1993 to eliminate interior roads, signs, machinery, fences, posts, bridges, and buildings and other negative aesthetics in an effort to make the site more “natural” looking.

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It's not just the volunteers who have helped preserve the site. According to legendary Illinois Nature Conservancy leader Steve Packard, "Nachusa's many conservation-minded neighbors are one of the reasons so many rare species have survived in this area." Some of these "conservation-minded neighbors" have (since Packard's statement in 1989) sold or donated property to Nachusa. (*Prairie Smoke*, 1989). Today, there are two paid full-time employees and approximately four seasonal workers at Nachusa.

Cropland restoration began in fall 1987, and "Local volunteers led seed collecting expeditions in and around Nachusa." (Lubbs, 1991). Seeds were scattered for the first time. Recruiting enough people to help harvest seeds for the land needed was problematic, Lubbs said. Spring 1990 was Nachusa's first spring planting. Seeds were blended with agricultural lime and oats and spread with a fertilizer buggy into disced ground, according to Lubbs. The ground was then lightly harrowed. Annual burn maintenance followed, he said. In 1991, 25 volunteers spread over 2000 bulk pounds of cleaned and uncleaned seed over disced ground. Much of this was planted in land formerly planted to soybeans, also lightly disced. (Lubbs, 1991) In the June 1, 1994, issue of *Prairie Smoke*, it was noted Nachusa was now divided up into 11 management units.

As site restoration and preservation efforts continued, those involved with Nachusa wanted to invite the public to enjoy and understand their work. With this in mind, the first celebratory "Autumn on the Prairie" was hosted in 1990 (*Prairie Smoke*, 1991). Food and drinks, displays about Native



Americans, prairie plants and wildlife, and art and photography about the prairie were included. Volunteers did demonstrations and led tours. Noted naturalist Floyd Swink (co-author of *Plants of the Chicago Region*) guest hosted a tour in 1992 (*Prairie Smoke*, 1992). The celebration continues each autumn today on the third Saturday in September; it attracts more than 600 people.

A major milestone in Nachusa Grassland's life came in 2008, when "Friends of Nachusa Grasslands" was established. "Friends" is a nonprofit, tax-exempt entity created by Nachusa Grasslands volunteers dedicated to supporting Nachusa Grasslands, and is not affiliated with The Nature Conservancy. In 2013, the group had an operating budget of \$88,000, a social media site

(Facebook), and a website (nachusagrasslands.org). "Friends" sends out an annual report each year, and funds research projects at Nachusa Grasslands. The president of the organization at this writing is Bernard (Bernie) Buchholz.

In October 2014, 20 bison were reintroduced to Nachusa. At the close of 2014, Nachusa has 30 bison. More bison are planned to be purchased in 2015. The bison come from other Nature Conservancy sites; originating from Wind Cave National Park in South Dakota. The bison, which have been extirpated from this portion of Illinois since the early 1800s (Greenberg, 2004), are a keystone species of tallgrass prairies. They are expected to be a tremendous visitor incentive as they roam over the acreage and graze on grasses. Nachusa is currently raising \$6 million toward the purchase, housing, and maintenance of the bison (Kleiman, 2013).

With this in mind, Nachusa Grasslands outreach committee was formed in October 2013, that is

working toward creating an Interpretive Master Plan, a visitor use plan, construction of new parking lots, and interpretive exhibits (Kleiman, 2013).

Nachusa also has completed its first comprehensive *Nachusa Grasslands Site Conservation Plan*, drafted in the last months of 2013.

Today, Nachusa provides opportunities for us to contemplate land use effects over time and at different points in time. Tallgrass prairie once made up two-thirds of Illinois' landscape; the remnants and restorations at Nachusa Grasslands are significant habitats that offer visitors an experience of a once vibrant and now-vanishing ecosystem.



It's an exciting future for that little prairie remnant that managed to beat the odds and survive the plow in Illinois so many years ago...

**...all because of the call of the upland sandpiper
--and a couple that paid attention.**



Crosby, Cindy L, et al. "Nachusa Grasslands Interpretive Master Plan." *University of Wisconsin-Stevens Point*, 2014.